

In the United States Patent & Trademark Office

In the Application of:

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For the Invention:

Drinking Cup Identification System

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DRINKING CUP IDENTIFICATION SYSTEM

RELATED APPLICATIONS

[0001] This application is a continuation of U.S. Patent application 09/946,333, filed in the United States Patent & Trademark Office on September 6, 2001, and claims the benefit of priority therefrom.

FIELD OF INVENTION

[0002] The present invention relates to a drinking cup identification system, particularly an identification system for tracking a set of a plurality of a child's drinking cups. More specifically, the present invention relates to an identification system in which each of the plurality of drinking cups of a particular set is provided with a unique identifying indicia selected from a sequential pattern of indicia. The sequential pattern of indicia, which can be in a variety of forms, enables the user to plainly identify each of the plurality of drinking cups and also to visually track the set of drinking cups by quickly determining whether one or more of the plurality of drinking cups is missing from a particular set.

BACKGROUND OF THE INVENTION

[0003] Lidded drinking cups, particularly baby bottles and "sippy" cups, commonly are used to serve beverages to toddlers. These types of drinking cups usually are provided with securely fastened lids, thereby making them "spill-proof". As a result, they are ideally suitable for toddlers. Because a parent (or other care-giver) can give the toddler his/her beverage in such a drinking cup without worrying about the child spilling the beverage, the toddler can consume the beverage without supervision. Typically, the toddler will carry the drinking cup to other rooms of a house or even outside. The toddler also can use the drinking cup while secured in a car seat, the parent knowing that the risk of spillage is minimal. However, a disadvantage to the use of these lidded drinking cups is that when the toddler tires of drinking the beverage or becomes distracted, he/she drops, hides or otherwise misplaces the cup. Certain problems can arise when the misplaced drinking cup still contains some beverage. For instance, when a drinking cup is left in a hot car or other hot

environment, the remaining beverage can ferment quickly and emit a strong, unpleasant odor. More importantly, if the toddler finds the misplaced drinking cup, hours or even days, after it was initially used, the remaining beverage may have spoiled and possibly may have become toxic. Thus, if the child drinks the spoiled beverage, the child could become severely ill. Currently, there is no identification system for visually tracking these lidded drinking cups in order to prevent a toddler from accidentally drinking a spoiled and potentially hazardous beverage from a misplaced drinking cup.

[0004] Drinking cups having ornamental designs, including mugs, baby bottles, and "sippy" cups, are well known in the prior art. Many such drinking cups are provided with ornamental designs purely to enhance the aesthetic nature of the cups. The use of advertising logos, pithy quips, souvenir memorabilia and the like as ornamental designs for drinking cups also is conventional practice. For instance, U.S. Patent 566,761 to Hosmer, issued September 1, 1896 discloses the use of an advertising label which is applied about the circumference of a bottle.

[0005] It is also well known to provide cartoon characters, animals and other inviting designs on children's drinking cups. For example, U.S. Patent 2,156,351 to Paul, issued May 2, 1939, provides a child's feeding bowl or drinking cup having a display frame on its bottom surface which is capable of receiving a picture, thereby induce children who are poor eaters to consume the entire contents of the bowl in order to see the picture. Similarly, U.S. Patent 3,514,887 to Jacob, issued June 2, 1970, discloses a child's feeding utensil or cup having a transparent bottom with a slot for receiving a visual display card to induce the child to finish the contents of the utensil. In U.S. Patent 5,729,922 to Peterson et al., issued March 24, 1998, a drinking vessel is disclosed having an open face slot on its outer surface for holding a selected tile from a plurality of interchangeable tiles bearing indicia for conveying a selected design or message. However, none of these drinking vessels provides a parent or other care-giver with a visual identification system for tracking a plurality of drinking cups.

[0006] Identification systems have been developed for distinguishing a particular drinking cup. For example, Canadian Patent 491,642 to Vallee, issued March 31, 1953, discloses a set of identification plates, each plate being in the form of a clip bearing a particular indicia which is snapped onto the rim of a drinking glass. U.S. Patent 5,261,176 to David et al.,

issued November 16, 1993, discloses the use of beverage identification tags for cup handles, particularly for use in the restaurant service industry, the tag being coded to indicate the kind of beverage within the cup. However, such identification clips and tags are incompatible with lidded drinking cups which have no exposed rim or cup handle. In addition, the use of a detachable identification means is impractical and unsuitable for toddlers who have a natural tendency to detach and lose or possibly swallow such small objects such as the Vallee clips or David et al. tags.

[0007] U.S. Patent 5,191,979 to Nemeroff, issued March 9, 1993, discloses a set of drinking cups and a series of labels having identifying indicia, each cup having one identifying label applied thereto in order to distinguish one cup from another. In related U.S. Patent 5,301,802 to Nemeroff, issued April 12, 1994, a set of drinking cups is provided with two sets of labels having identifying indicia, the first set of labels is applied to the individual drinking cups in order to distinguish each cup. The second set of labels, which correspond to the first set, are used to identify the individual having a particular cup. Although the Nemeroff patents provide labels with identifying indicia which could be applied to a child's drinking cup, neither Nemeroff patent provides an identification system which allows a parent or other care-giver to visually track a plurality of drinking cups.

[0008] Despite the attempts of the prior art, a need still exists for an identification system for use with drinking cups which enables a user to visually track a set of a plurality of such drinking cups. Such an identification system should not only be capable of identifying each of a plurality of drinking cups but should also be capable of visually tracking each of the drinking cups. Such visual tracking should include determining when each drinking cup was used and whether any of the plurality of drinking cups are missing from a particular set. Moreover, such an identification system should be permanently affixed to each of the plurality of drinking cups so that a toddler cannot detach or otherwise remove the identification means. In addition, such an identification system should be aesthetically appealing to toddlers. Such an identification system also should be inexpensive to manufacture and be capable of being used on existing lidded drinking cups. Optionally, such an identification system should be designed as a learning aid for toddlers.

SUMMARY OF THE INVENTION

[0009] Accordingly, it is an object of the present invention to provide an identification system for a set of a plurality of drinking cups, particularly children's drinking cups, in which each of the plurality of drinking cups is provided with a unique identifying indicia.

[0010] It also is an object of the present invention to provide an identification system for a set of a plurality of drinking cups which enables the user to visually track each of the plurality of drinking cups in a particular set.

[0011] It is an additional object of the present invention to provide an identification system for a set of a plurality of drinking cups which enables the user to determine when each of the drinking cups was last used and whether any of the drinking cups from a set is missing.

[0012] It is a further object of the present invention to provide an identification system for a set of a plurality of drinking cups in which a unique identifying indicia is permanently affixed to each of the plurality of drinking cups.

[0013] It is another object of the present invention to provide an identification system for a set of a plurality of drinking cups which utilizes a sequential pattern of indicia in order to visually track each of the drinking cups in a particular set.

[0014] It is still another object of the present invention to provide an identification system for a set of a plurality of drinking cups wherein the unique identifying indicia affixed to the drinking cups is aesthetically appealing to toddlers.

[0015] It is yet another object of the present invention to provide an identification system for a set of a plurality of drinking cups which also functions as a learning aid.

[0016] It is an additional object of the present invention to provide an identification system for a set of a plurality of drinking cups which is inexpensive to manufacture and simple capable of being used on existed drinking cups.

[0017] Additional objects, advantages and novel features of the invention will be set forth in part in the description and claims which follow, and in part will become apparent to those skilled in the art upon examination of the following specification and claims or may be learned by practice of the invention.

[0018] These and other objects of the present invention are achieved by providing an identification system for a set of a plurality of drinking cups, wherein each of the plurality

of drinking cups is provided with a unique identifying indicia selected from a sequential pattern of indicia.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019] The present invention will be better understood with reference to the appended drawing sheets, wherein:

[0020] Figure 1 shows a plurality of baby bottles having a sequential pattern of indicia in the form of numbers.

[0021] Figure 2 shows a plurality of sippy cups having a sequential pattern of indicia in the form of the days of the week.

[0022] Figure 3 shows a plurality of sippy cups having a sequential pattern of indicia in the form of letters which spell the name of a children's character on both the cup body and the cup lid.

[0023] Figure 4 shows a plurality of sippy cups having a combination of sequential patterns of indicia in the form of shapes and numerals.

[0024] Figure 5A shows a set of self-adhesive labels having a sequential pattern of indicia in the form of numbers for application to a plurality drinking cups.

[0025] Figure 5B shows a drinking cup having a unique identifying indicia in the form of the self-adhesive labels applied thereto.

[0026] Figure 6 shows a drinking cup in which a unique identifying indicia is molded within the drinking cup.

[0027] Figure 7 shows a drinking cup in which a unique identifying indicia is molded within the drinking cup.

DETAILED DESCRIPTION

[0028] The present invention relates to a drinking cup identification system, particularly an identification system for monitoring and visually tracking a set of drinking cups. More specifically, the present invention relates to an identification system for a set of drinking cups comprising a plurality of drinking cups wherein each of the plurality of drinking cups is provided with a unique identifying indicia selected from a sequential pattern of indicia. It is to be understood that the term "drinking cups" is meant to include any type of lidded

drinking cup, particularly any type of lidded drinking cup which is used by babies and toddlers. Suitable drinking cups include, for example, baby bottles, "sippy cups" and child-sized plastic cups with snap-on covers or screw-on covers.

[0029] The identification system utilizes a plurality of unique identifying indicia which can be classified into a sequential pattern. Thus, any type of indicia which can be classified into a sequential pattern is suitable for use in the present invention. Suitable such unique identifying indicia include, for example, a series of numbers (1, 2, 3, 4, 5, 6, 7), a series of letters (A, B, C, D, E, F, G), a series of letters which spell a name, such as a child's name or a children's cartoon character, the days of the week (Monday, Tuesday, Wednesday....), a series of related cartoon characters, such as the seven dwarfs, the Winnie the Pooh and friends characters, a series of specified shapes (such as geometric shapes), symbols or designs, including for example, flowers, a train having an engine, caboose and several distinct cars, as well as words, phrases and any combination of such unique identifying indicia that can be classified into a sequential pattern.

[0030] Referring to Figure 1, a set 10 of baby bottles 11 is shown, each baby bottle being provided with a unique identifying indicia 12 in the form of a sequential pattern of numbers. More specifically, a plurality of baby bottles 11a, 11b, 11c, 11d and 11e is shown, each of the plurality of baby bottles being provided with a unique identifying indicia 12a, 12b, 12c, 12d and 12e corresponding to the numbers "1", "2", "3", "4" and "5", thereby forming a sequential pattern of the numbers "1" through "5" respectively. In set 10, the plurality of baby bottles is five. Thus, the parent or other care-giver easily can monitor and visually track the set of baby bottles and quickly determine whether one or more of the baby bottles is missing. In addition, the parent or other care-giver also can determine very simply which specific baby bottle is missing by observation of the unique identifying indicia on each of the bottles. The type of sequential pattern shown in Figure 1 also aids the parent or care-giver in ascertaining the length of time a particular baby bottle has been missing by simple notation of the unique identifying indicia on the missing bottle. For example, if baby bottle 11a having the unique identifying indicia "1" was the first bottle distributed to the toddler at 7:00 AM and subsequent bottles were distributed sequentially in four hour intervals, then the parent or care-giver simply has to note the identifying indicia on the current bottle to be

given to the toddler and calculate the time differential. This sequential pattern also can assist the toddler in the learning of numbers.

[0031] Figure 2 shows a set **20** of a plurality of sippy cups **21**, each sippy cup being provided with a unique identifying indicia **22** in the form of a sequential pattern conforming to the days of the week. More specifically, a plurality of sippy cups **21a**, **21b**, **21c**, **21d**, **21e**, **21f** and **21g** is shown, each of the plurality of sippy cups being provided with a unique identifying indicia **22a**, **22b**, **22c**, **22d**, **22e**, **22f**, and **22g** corresponding to the days of the week "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday" and "Sunday" respectively. The use of the "days of week" sequential pattern can be of particular assistance to the parent or care-giver when the sippy cups **21** are given to the toddler on the specific day of the week. This sequential pattern also can assist the toddler in the learning of days of the week.

[0032] Figure 3 shows a set **30** of a plurality of sippy cups **31**, each sippy cup being provided with a unique identifying indicia **32** in the form of a sequential pattern of letters which spell the name "BARNEY", a popular children's character. More specifically, a plurality of sippy cups **31a**, **31b**, **31c**, **31d**, **31e** and **31f** is shown, each of the plurality of sippy cups being provided with a unique identifying indicia **32a**, **32b**, **32c**, **32d**, **32e** and **32f** corresponding to the letters "B", "A", "R", "N", "E" and "Y" respectively. Each of the plurality of cups also may be provided with a purple dinosaur depicting the character "Barney". In Figure 3, each of the sippy cups **31** comprises a lid **33** having a collar **34** about the circumference of the lid. A second unique identifying indicia **35** corresponding to indicia **32** is provided on the collar **34**. Specifically, collar **34a** is provided with indicia **35a** in the form of a "B" corresponding to indicia **32a**. Similarly, collars **34b**, **34c**, **34d**, **34e** and **34f** are provided with indicia **35b**, **35c**, **35d**, **35e** and **35f** corresponding to the letters "A", "R", "N", "E" and "Y" respectively. In this manner, each lid **33** can be matched to its corresponding cup **31**. This sequential pattern also can assist the toddler in the spelling names as well as matching the identifying and matching the letters provided on the cups **31** and lids **33**.

[0033] Figure 4 shows a set **40** of a plurality of sippy cups **41**, each sippy cup being provided with a unique identifying indicia **42** in the form of a combination of shapes and a sequential pattern of numbers. More specifically, a plurality of sippy cups **41a**, **41b**, **41c**, **41d** and **41e**

is shown, each of the plurality of sippy cups being provided with a unique identifying indicia **42a**, **42b**, **42c**, **42d** and **42e**. The sequential pattern utilizes a combination of shapes and numbers which not only uniquely identify each cup **41** but also assist the toddler with learning numbers and shapes as well as counting skills. Referring to Figure 4, indicia **42a** is a single "circle" having the numeral "1" therein, indicia **42b** is two "squares", each "square" having the numeral "2" therein, indicia **42c** is three "triangles", each "triangle" having the numeral "3" therein, indicia **42d** is four "diamonds", each "diamond" having the numeral "4" therein, and indicia **42e** is five "hearts", each "heart" having the numeral "5" therein. Each of the sippy cups **41** comprises a lid **43** having a collar **44** about the circumference of the lid. A second unique identifying indicia **45** corresponding to indicia **42** is provided on the collar **44**. Thus, indicia **45a** is a "circle", indicia **45b** is a "square", indicia **45c** is a "triangle", indicia **45d** is a "diamond" and indicia **45e** is a "heart".

[0034] Although several sequential patterns have been shown in Figures 1 to 4, it is to be understood that the present invention contemplates the use of any sequential pattern of identifying indicia or combinations of sequential patterns of identifying indicia are contemplated to be within the scope of the present invention.

[0035] Each of the plurality of drinking cups in a particular set can be provided with a unique identifying indicia from a sequential pattern by any means as will be well known to those skilled in the art. Suitable means for providing each drinking cup with a unique identifying indicia include, for example, applying to the drinking cup an adhesive label having a unique identifying indicia printed thereon, extrusion molding the unique identifying indicia during the manufacture of the drinking cup, inscribing the unique identifying indicia onto the outside wall and/or the inside wall the drinking cup, such as by machining, chemical or laser etching of the drinking cup surface, insert molding the unique identifying indicia within the wall of the cup or onto the wall of the cup, as well as pad printing, silk screening printing, hot stamping or plain printing the unique identifying indicia to the drinking cup.

[0036] Referring to Figure 5A, a strip **55** of adhesive labels **56** is shown having a unique identifying indicia **57**. Specifically, each label **56a**, **56b**, **56c**, **56d** and **56e** has a unique identifying indicia **57a**, **57b**, **57c**, **57d** and **57e** corresponding to the numbers "1", "2", "3", "4" and "5", thereby forming a sequential pattern of the numbers "1" through "5"

respectively. The strip **55** also has a second set of adhesive labels **58**, each label having a unique identifying indicia **59** corresponding to unique identifying indicia **57**. Thus, each of the adhesive labels **58a**, **58b**, **58c**, **58d** and **58e** having a unique identifying indicia **59a**, **59b**, **59c**, **59d** and **59e** which correspond to unique identifying indicia **57a**, **57b**, **57c**, **57d** and **57e**.

[0037] Figure 5B shows a set **50** of a plurality of drinking cups **51** each having lid **52** and collar **53**. Adhesive labels **56a**, **56b**, **56c**, **56d** and **56e** are applied to the corresponding drinking cups **51a**, **51b**, **51c**, **51d** and **51e**, thereby providing each drinking cup **51** with a unique identifying indicia **57a**, **57b**, **57c**, **57d** and **57e**. Adhesive labels **58a**, **58b**, **58c**, **58d** and **58e** are applied to the corresponding collars **53a**, **53b**, **53c**, **53d** and **53e**, thereby providing each collar with a unique identifying indicia **59a**, **59b**, **59c**, **59d** and **59e**.

[0038] Figures 6 and 7 illustrate to other methods for providing a drinking cup with a unique identifying indicia. Figure 6 shows a drinking cup **61** having a lid **62** and collar **63** having a first unique identifying indicia **64** machined molded within the drinking cup **61** and a second unique identifying indicia **65** machine molded within the collar **63**. Figure 7 shows a drinking cup **71** having a lid **72** and collar **73** wherein a first unique identifying indicia **74** is inscribed into the drinking cup **71** and a second unique identifying indicia **75** is inscribed into the collar **73**.

[0039] While particular embodiments of the invention have been described, it will be understood, of course, that the invention is not limited thereto, and that many obvious modifications and variations can be made, and that such modifications and variations are intended to fall within the scope of the appended claims.